

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All future correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless correspondence is directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notification.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

50187

7590

04/24/2006

RONALD I. EISENSTEIN  
 NIXON PEABODY LLP  
 100 SUMMER STREET  
 BOSTON, MA 02110

07/25/2006 SSANDAR1 00000005 192380 1005

01 FC:1501 1400.00 DA  
 02 FC:1504 300.00 DA  
 03 FC:8001 30.00 DA

**Certificate of Mailing or Transmission**  
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Nicole M. Aguirre (Depositor's name)  
 (Signature)  
 (Date) 7/24/06

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/057,136      | 01/25/2002  | Jeffrey Schlom       | 700953-047113-C     | 3148             |

TITLE OF INVENTION: RECOMBINANT POX VIRUS FOR IMMUNIZATION AGAINST MUC1 TUMOR-ASSOCIATED ANTIGEN

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO           | \$1400    | \$300           | \$1700           | 07/24/2006 |

| EXAMINER          | ART UNIT | CLASS-SUBCLASS |
|-------------------|----------|----------------|
| WHITEMAN, BRIAN A | 1635     | 424-093200     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 NIXON PEABODY LLP  
 2  
 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

Therion Biologics Corporation;

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Cambridge, MA; Boston, MA; and Bethesda, MD

Dana-Farber Cancer Institute; and Department of Health and Human Services, US, National Institutes of Health

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☒ Publication Fee (No small entity discount permitted)  
☒ Advance Order - # of Copies 10

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 19-2380 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Ronald I. Eisenstein

Date July 24, 2006

Typed or printed name

Ronald I. Eisenstein

Registration No. 30,628

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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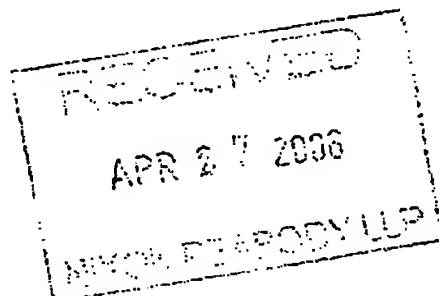


## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
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Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

50187 7590 04/24/2006  
RONALD I. EISENSTEIN  
NIXON PEABODY LLP  
100 SUMMER STREET  
BOSTON, MA 02110



EXAMINER

WHITEMAN, BRIAN A

ART UNIT

PAPER NUMBER

1635

DATE MAILED: 04/24/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/057,136      | 01/25/2002  | Jeffrey Schlom       | 700953-047113-C     | 3148             |

TITLE OF INVENTION: RECOMBINANT POX VIRUS FOR IMMUNIZATION AGAINST MUC1 TUMOR-ASSOCIATED ANTIGEN

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO           | \$1400    | \$300           | \$1700           | 07/24/2006 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## HOW TO REPLY TO THIS NOTICE:

## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Jul 24 06 12:37p

NIXON PEABODY

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UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office  
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www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 10/057,136   | 01/25/2002  | Jeffrey Schlom       | 700953-047113-C               | 3148             |
| 50187  | 7590        | 04/24/2006           |                               |                  |
| RONALD I. EISENSTEIN<br>NIXON PEABODY LLP<br>100 SUMMER STREET<br>BOSTON, MA 02110 |             |                      |                               |                  |
|  |             |                      | EXAMINER<br>WHITEMAN, BRIAN A |                  |
|  |             |                      | ART UNIT<br>1635              | PAPER NUMBER     |
| DATE MAILED: 04/24/2006  |             |                      |                               |                  |

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**  
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 65 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 65 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

JUL 24 2006

PTO/SB/17 (01-05)

Approved for use through 07/31/2006. OMB 0551-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Fees pursuant to the Federal Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2006**☐ Applicant claims small entity status. See 37 CFR 1.27TOTAL AMOUNT OF PAYMENT (\$)  
1,730.00**Complete if Known**

|                      |                      |
|----------------------|----------------------|
| Application Number   | 10/057,136           |
| Filing Date          | January 25, 2002     |
| First Named Inventor | Jeffrey Schlom       |
| Examiner Name        | B.A. Whiteman        |
| Art Unit             | 1635                 |
| Attorney Docket No.  | 700953-047113-C2-RCE |

**METHOD OF PAYMENT (check all that apply)**

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 19-2380 Deposit Account Name: NIXON PEABODY LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Application Type | FILING FEES |                       | SEARCH FEES |                       | EXAMINATION FEES |                       | Fees Paid (\$) |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
|                  | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)         | Small Entity Fee (\$) |                |
| Utility          | 300         | 150                   | 500         | 250                   | 200              | 100                   |                |
| Design           | 200         | 100                   | 100         | 50                    | 130              | 65                    |                |
| Plant            | 200         | 100                   | 300         | 150                   | 160              | 80                    |                |
| Reissue          | 300         | 150                   | 500         | 250                   | 600              | 300                   |                |
| Provisional      | 200         | 100                   | 0           | 0                     | 0                | 0                     |                |

**2. EXCESS CLAIM FEES****Fee Description**

|  | Fee (\$) | Small Entity Fee (\$) |
|--|----------|-----------------------|
| Each claim over 20 (including Reissues)            | 50       | 25                    |
| Each independent claim over 3 (including Reissues) | 200      | 100                   |
| Multiple dependent claims                          | 360      | 180                   |

|  |                     |                 |                      |                                  |
|--|---------------------|-----------------|----------------------|----------------------------------|
| <b>Total Claims</b>  | <b>Extra Claims</b> | <b>Fee (\$)</b> | <b>Fee Paid (\$)</b> | <b>Multiple Dependent Claims</b> |
| - 20 or HP =   | x                   | =               |                      | <b>Fee (\$)</b>                  |
| HP = highest number of total claims paid for, if greater than 20.      |                     |                 |                      |                                  |
| <b>Indep. Claims</b>   | <b>Extra Claims</b> | <b>Fee (\$)</b> | <b>Fee Paid (\$)</b> |                                  |
| - 3 or HP =  | x                   | =               |                      | <b>Fee Paid (\$)</b>             |
| HP = highest number of independent claims paid for, if greater than 3. |                     |                 |                      |                                  |

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

|                     |                     |   |                 |                      |
|---------------------|---------------------|---|-----------------|----------------------|
| <b>Total Sheets</b> | <b>Extra Sheets</b> | <b>Number of each additional 50 or fraction thereof</b> | <b>Fee (\$)</b> | <b>Fee Paid (\$)</b> |
| - 100 =             | / 50 =              | (round up to a whole number) x                          | 250.00          | = 0.00               |

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Issue Fee (\$1,400), Publication Fee (\$300), Advance Copies Fee (\$30)

Fees Paid (\$)

1,730.00

**SUBMITTED BY**

|                   |                             |                                      |         |           |              |
|-------------------|-----------------------------|--------------------------------------|---------|-----------|--------------|
| Signature         | <i>Ronald I. Eisenstein</i> | Registration No.<br>(Attorney/Agent) | 30,628  | Telephone | 617-345-6054 |
| Name (Print/Type) | Ronald I. Eisenstein        | Date                                 | 7/24/06 |           |              |

This collection of information is required by 37 CFR 1.135. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**Nixon Peabody LLP**

Attorneys at Law

100 Summer Street  
Boston, Massachusetts 02110-2131  
(617) 345-1000

Fax: (617) 345-1300

**PRIVILEGE AND CONFIDENTIALITY NOTICE**

The information in this fax is intended for the named recipients only. It contains privileged and confidential matter. If you have received this fax in error, please notify us immediately by a collect telephone call to (617) 345-1000 and return the original to the sender by mail. We will reimburse you for postage. Do not disclose the contents to anyone. Thank you.

**FAX**

| To:                    | Company | Fax #:                            | Telephone #: |
|------------------------|---------|-----------------------------------|--------------|
| 1) MAIL STOP ISSUE FEE | US PTO  | <del>2885</del><br>(571) 273-8900 |              |

INTERNATIONAL PHONE NUMBERS MUST INCLUDE COUNTRY &amp; CITY CODE. SEE LOCAL WHITE PAGES FOR CODES NEEDED.

|  |                     |   |  |
|--|---------------------|---|--|
| From: Ronald I. Eisenstein   | Date: July 24, 2006 | No. of Pages: 10<br>(including this page) |  |
| <b>Comments:</b><br><br>Attached hereto please find the following:<br><br>In re application of: Jeffrey Schlom; Judith Kantor; Donald Kufe; Dennis Panicali;<br>and Linda Gritz<br>Application No.: 10/057,136      Group No 1635<br>Filed: January 25, 2002      Examiner Brian A. WHITEMAN<br>Confirmation No.: 3148      Customer No.: 50187<br>For: RECOMBINANT POX VIRUS FOR IMMUNIZATION AGAINST MUC1<br>TUMOR-ASSOCIATED ANTIGEN<br><br>1. Certificate of Facsimile (1 pg.);<br>2. Notice of Allowance and Fee(s) Due -- PTOL-85 in duplicate (6 pp.); and<br>3. Fee Transmittal in duplicate (Issue Fee/Advance Copies/Publication Fee) (2 pp.). |                     |   |  |

Original of the transmitted document will be sent by:

☐ First Class Mail☐ Overnight Mail☐ Hand Delivery☐ This transmission will be the only form of delivery of this document

**IF YOU DO NOT RECEIVE ALL OF THESE PAGES, PLEASE CONTACT THE FAX OPERATOR AS SOON AS POSSIBLE AT: (617) 345-1246. THANK YOU.**

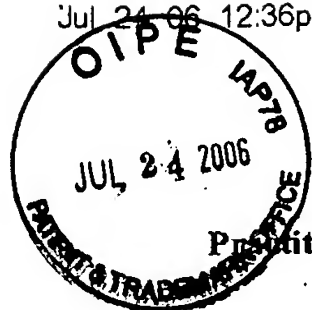
CONFIRMATION: DATE SENT \_\_\_\_\_ TIME \_\_\_\_\_ BY \_\_\_\_\_

**INTEROFFICE TO:**    ☐ Albany      ☐ Boston      ☐ Buffalo      ☐ Florida      ☐ Garden City      ☐ Hartford      ☐ Los Angeles  
                          ☐ Manchester      ☐ New York City      ☐ Northern Virginia      ☐ Orange County      ☐ Philadelphia      ☐ Providence  
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| To:                    | Company | Fax #: | Telephone #: |
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| 1) MAIL STOP AMENDMENT | US PTO  |        |              |

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| User #: 7468               | Ext: 6054 | Disbursement Amount: \$                |                |



Proprietor's Docket No. 700953-047113-C2-RCE

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jeffrey Schlom; Judith Kantor; Donald Kufe; Dennis Panicali;  
and Linda Gritz  
Application No.: 10/057,136 Group No 1635  
Filed: January 25, 2002 Examiner Brian A. WHITEMAN  
Confirmation No.: 3148 Customer No.: 50187  
For: RECOMBINANT POX VIRUS FOR IMMUNIZATION AGAINST MUC1  
TUMOR-ASSOCIATED ANTIGEN

MAIL STOP ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark Office at (571) 273-8300 on the date shown below:

1. Certificate of Facsimile (1 pg.);
2. Notice of Allowance and Fee(s) Due – PTOL-85 in duplicate (6 pp.); and
3. Fee Transmittal in duplicate (Issue Fee/Advance Copies/Publication Fee) (2 pp.).

Date: 7/24/06, 2006

Signature

Nicole M. Aguirre

(type or print name of person certifying)